UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,838	01/30/2004	Norio Yabe	1341.1178	4577

21171   7590   02/02/2009
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
LAY, MICHELLE K

ART UNIT	PAPER NUMBER
2628	

MAIL DATE	DELIVERY MODE
02/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/766,838	YABE ET AL.
	Examiner	**Art Unit**	
	MICHELLE K. LAY	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2008*.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-28* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *13-28* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed 10/14/2008 has been entered and made of record. Claims 1-12 have been cancelled. Claims 13-28 are pending.

The amendment to the specification has overcome the 101 rejection made in the non-final office action filed 11 July 2008 regarding claims 17-20.

Response to Arguments

Applicant's arguments filed 10/14/2008 have been fully considered but they are not persuasive. Applicant argues Barros (2004/0119759 A1) fails to teach obtaining at least one fill area and a number of colors. Examiner respectfully disagrees. Barros does teach the user selecting topic "AA", however the system retrieves the source data from the topical database (203) and determines the symbol, pattern, and color for "AA" attribute (210) [0082]. Therefore, the fill and color is obtained from the tropical database (203), not selected by the user.

Applicant further argues Barros fails to teach a display control unit that performs the new limitations. However, Barros teaches that as the user selects the topic, such as "AA", the Topical Database (203) retrieves the source data and determines the symbol, pattern and color for "AA" attribute (210) and alters the map display (611) and displays that topic [0082]. Therefore, the system of Barros alters the appearance of at least one data object (e.g. "AA") depending on the attributes obtained from the Topical Database

(203). By changing the appearance, the data object "AA" is distinguishable from other

objects, such as "DD" described in [0084].

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires

the original numbering of the claims to be preserved throughout the prosecution. When

claims are canceled, the remaining claims must not be renumbered. When new claims

are presented, they must be numbered consecutively beginning with the number next

following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 26 (the second 26 that is dependent from claim 19) needs to

be renumbered to 27.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims **13**, **14**, **17**, **18**, **21**, **22**, **25** and **26** are rejected under 35 U.S.C. 103(a) as

being unpatentable over Barros (2004/0119759 A1) and Okude et al. (6,587,784 B1).

In regards to claims **13** and **17**, Barros teaches the following limitations:

-Software for carrying out the method/system of Barros [abstract]

-A data display device comprising: [Fig. 1 (10)]

-An obtaining unit that obtains at least one of a fill area and a number of colors for a

plurality of data objects to be displayed as a filled area, the fill area and the number of

colors being an appearance characteristic of each data object; [Barros teaches an

appearance property unit showing a plurality of object sets (layered maps, as in Figure

2b – layers 305-308, Layered Map Set 3a in Figure 3 – plurality object sets shown in

map Key 4 in Figure 6a) represented as different symbols – thusly equivalent to a 'same

data representation type' on a screen, where the appearance property can be color

[0082], that is the system determines the "symbol, pattern, and color" for 'AA' attribute –

where if a symbol is opaque or transparent [0090], the effects are calculated and

shown, and such items can be highlighted, where the degree of blending is determined

by that. Different types of object sets – e.g. terrain features (Figure 6c, hills notation),

status of different areas (see Figure 6d) – overlapping areas have different patterns

[0092]. Symbols have different sizes based on rating or capacity, such as in Figure 6e,

the shown Key. Another good example is Figure 7e, where vegetation type is shown as

a function of altitude with the location of the various facilities, again see Key. This

therefore teaches the use of a fill area (e.g. different pattern) and color as above, where

although the user may select the topic "AA", the system determines (said **obtain**) all of

the attributes. Additionally, each symbol of Barros has fill objects represented in a fill

data representation type, as explained above, since such symbols have both color and

a pattern applied to them. Obviously changing the color of an object is simply one form

of highlighting or emphasis.]

-A display control unit that alters an appearance of at least one data object of the

plurality of data objects to be displayed as a fill area depending on at least one of the fill

area and the number of colors obtained by the obtaining unit as the appearance

characteristic, in order to distinguish among different data objects, and displays the

plurality of data objects. [Barros clearly teaches that the graphical objects can be

highlighted or changed as in [0079-0080, 0086, 0090-0097]. Furthermore, as the user

selects the topic, such as "AA", the Topical Database (203) retrieves the source data

and determines the symbol, pattern and color for "AA" attribute (210) and alters the map

display (611) and displays that topic [0082]. Therefore, the system of Barros alters the

appearance of at least one data object (e.g. "AA") depending on the attributes obtained

from the Topical Database (203). By changing the appearance, the data object "AA" is

distinguishable from other objects, such as "DD" described in [0084]].

Okude clearly teaches the objects within a map can have their appearance

changed based on the number of objects present, e.g. the appearance of a building is

shown differently with fewer floors based on the appearance property can clearly

represent the number of floors and/or similar, as in Figure 11, steps 601a, 602b, 603b,

or in Figure 12, steps 601a, 603c, where that determination is made (or Figure 7) –

10:10-30, 11:5-26, 11:55-12:55, 13:1-14:5, and the like. Clearly, the appearance

property can be building height and/or number of floors, which clearly are "the number

of data objects" and/or the like. See – Figure 10, Figures 13A-13B, and the like, clearly

different categories of buildings and rankings exist – navigation landmarks, user-

selected groupings and the like as well.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to allow the system of Barros to be able to change the

number of objects present to illustrate a data quality, as taught by Okude, because such

systems (2:28-3:45, Okude) allow the user to more easily understand of elements of the

map having attributes noticeable by a user, such that the appearance property unit

alters fill area, colors, and a number of objects to illustrate specific quantities about

objects on a map, which would be in keeping with the symbol size notation shown in the

key of Barros in Figure 6e, since altering the number of objects makes it easier to

comprehend the quantities being depicted, as stated in the cited section of Okude,

where obviously changing the color and pattern represent quantities already known to

be beneficially varied.

In regards to claims **14** and **18**, claims 14 and 18 recites the same limitations as claims

13 and 17 respectively. Therefore, the same rationale used for claims 13 and 17 is

applied. Furthermore, Barros teaches in the various Figures already cited data in a "plot

data representation type" as in Figure 3a, 6d, 7e, 7f, 9a, and 9b.

In regards to claim **21**, Barros teaches that if the symbol (said **at least one object**) is

designated as **transparent**, the program calculates the alteration of the underlying map

colors within the area. For layers of slots, a hilite may be an outline or filled shape; it

may be opaque or a transparent tone altering the color of the underlying image [0090].

In regards to claim **22**, claim 22 recites similar limitations as claim 21. Therefore, the

same rationale used for claim 21 is applied.

In regards to claim **25**, claim 25 recites similar limitations as claim 21. Therefore, the

same rationale used for claim 21 is applied.

In regards to claim **26**, claim 26 recites similar limitations as claim 21. Therefore, the

same rationale used for claim 21 is applied.

2.   Claims **15**, **19**, **23** and **27** are rejected under 35 U.S.C. 103(a) as unpatentable

over Barros (2004/0119759 A1) in view of Okude et al. (6,587,784 B1) and Sakomoto et

al (US 2005/0052462 A1).

Barros teaches the limitations of claims 15 and 19 with the exception of teaching

line contours. However, in regards to claims 15 and 19, claims 15 and 19 recites the

same limitations as claims 13 and 17 respectively. Therefore, the same rationale used

for claims 13 and 17 is applied. Furthermore, Sakomoto clearly teaches a "line contour

object", e.g. the road in Figure 6 and in [0023], where Okude also shows roads but does

expressly class them as a different kind of object. Sakomoto teaches that it is well

known in the art to vary color of objects on a map to emphasize them and to make them

more visible [0023]. Changing the color of an object is equivalent to changing its graphical fill, as the term "fill" is well known in the art to mean filling an object with a color. It would be obvious to apply the techniques of Sakomoto to that of Okude, since Okude applies such to mapping software and directions and is clearly an analogous art, and obviously changing the color of an object is simply one form of highlighting or emphasis, and clearly the maps of Okude could have information added to them in the manner of Okude, where such information is obviously of importance to the user (e.g. the location of construction and traffic) and would clearly be advantageous for the user to have ([0196-0198])., and is presented in a manner that is intuitive and easy for the user to understand. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Sakomoto with Barros/Okude for at least the above reasons.

In regards to claim **23**, Barros teaches that if the symbol (said *at least one object*) is designated as *transparent*, the program calculates the alteration of the underlying map colors within the area. For layers of slots, a hilite may be an outline or filled shape; it may be opaque or a transparent tone altering the color of the underlying image [0090].

In regards to claim **27**, claim 27 recites similar limitations as claim 23. Therefore, the same rationale used for claim 23 is applied.

3.   Claims **16**, **20**, **24** and **28** are rejected under 35 U.S.C. 103(a) as unpatentable

over Barros (2004/0119759 A1) in view of Okude et al. (6,587,784 B1), McQuarrie et al

(6,658,375 B1) and Pearce (2005/0099321 A1).

Barros teaches the limitations of claims 16 and 20 with the exception of teaching

vector lines. However, in regards to claims 15 and 19, claims 15 and 19 recites the

same limitations as claims 13 and 17 respectively. Therefore, the same rationale used

for claims 13 and 17 is applied. Furthermore, McQuarrie clearly teaches the output of

various simulations as being output as a plot output, and further as a vector map

overlaid onto a contour plot and a plot diagram generally (Figures 5-8c, and 24:55-

25:11), where these are clearly well known forms in which data could be output.

Clearly, when a vector plot is overlaid onto a contour plot, it would be desirable that the

vector map not occludes the contour map. Next, it is obvious that many types of

information, particularly average traffic speeds (e.g. traffic jam information) could be

provided in vector format to the user with the direction of traffic being indicated by vector

format, where vector data is more intuitive to the user and makes it easier to grasp

patterns, where it is known to overlay traffic speed information on roads on a map in for

example a navigation unit in an automobile. See Pearce [0053], to provide better

information to the user on unsafe or unusual traffic situations and provide more accurate

routing information, where vector format would be easier for the user to understand

since the views of roads could be obscured by buildings and the like in the system of

Okude. Clearly, the system of Pearce provides such data and coloring and overlay on

maps, and McQuarrie illustrates and teaches how such data format in vector format is

more useful to users and the like. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Okude to: 1) show

traffic information as per the Pearce reference in the manner described in overlay

format and 2) to show such information in vector format as per the McQuarrie reference.

In regards to claim **24**, Barros teaches that if the symbol (said *at least one object*) is

designated as *transparent*, the program calculates the alteration of the underlying map

colors within the area. For layers of slots, a hilite may be an outline or filled shape; it

may be opaque or a transparent tone altering the color of the underlying image [0090].

In regards to claim **28**, claim 28 recites similar limitations as claim 24. Therefore, the

same rationale used for claim 24 is applied.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Johri (5,420,968)

Watanabe et al. (6,169,516 B1)

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday-Friday 7:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee M. Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle K. Lay/
Examiner, Art Unit 2628
28 January 2009

/Kee M Tung/
Supervisory Patent Examiner, Art Unit 2628